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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,174	09/30/2003	Chin-Tan Huang	MR1683-502	1249

4586 7590 08/11/2004

ROSENBERG, KLEIN & LEE
3458 ELLICOTT CENTER DRIVE-SUITE 101
ELLICOTT CITY, MD 21043

EXAMINER

THOMAS, DAVID B

ART UNIT PAPER NUMBER

3723

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,174

Applicant(s)

HUANG, CHIN-TAN

Examiner

David B. Thomas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8 is/are allowed.
- 6) ☒ Claim(s) 9 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Claim Objections***

1. Claim 9 is objected to because of the following informalities: The preamble to claim 9 should state, "A screwdriver comprising", not "*The* screwdriver comprising". Also, on page 18 of the claims, line 2, "stele" should be "steel". Appropriate correction is required.

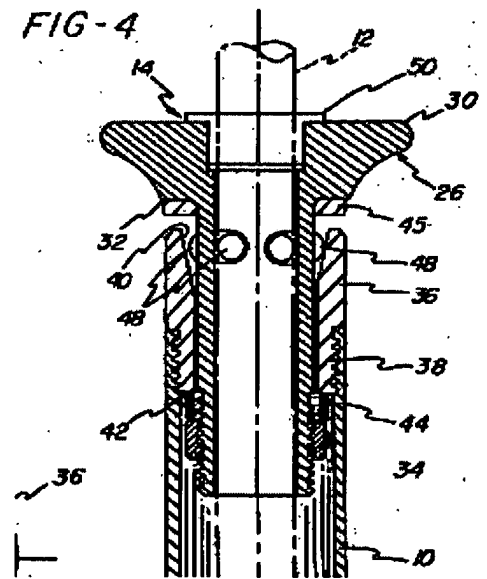
Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (5,078,349), in view of Beck (3,255,792), Li (6,363,819), or Liao (6,089,133).

Smith ('349) discloses a locking connection for an inner rod, which is telescopically received within an outer tube. The locking connector of Smith ('349) reads over the locking device, as presently claimed, except that the locking connector of Smith ('349) is not disclosed as being used with a tool, such as a screwdriver. However, it is well known in the art of hand tools, such as screwdrivers, to provide a locking device between the handle of the tool and the shaft that holds the driving portion, to allow the shaft to be inserted and removed from the handle, or to



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be extended or retracted within the handle. Beck ('792), Li ('819), or Liao ('133) serve as examples of such. Therefore, the examiner, respectfully, contends that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the locking connection of Smith ('349), by applying the locking connection in a hand tool, e.g., a screwdriver, as the provision of a locking connector for screwdrivers has been clearly taught by Beck ('792), Li ('819), or Liao ('133).

Allowable Subject Matter

4. Claims 1-8 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter: The present invention relates to a locking connector for a screwdriver, the connector providing a means for a shaft of the screwdriver to be telescopically received by the handle. The examiner note that the reference closest to the invention as claimed in claim 1, is to Cantlon (6,722,667). Cantlon ('667) discloses a workpiece connector for a power tool, such as a power screwdriver, the connector having a polygonal shaft for receipt by a chuck of a power tool; and, a locking device mounted in the workpiece connector for selective holding an operate shaft in place, the locking device including a stopper secured in the connector and having a hole defined therein and extending therethrough, the hole being co-axial with the hole in the stopper, the hole in the stopper including a tapered section facing the first end and having a diameter gradually enlarged relative to the first end, a slider extending through the stopper and partially received in the hole in the stopper, the slider being movable relative to the stopper, the slider having a polygonal hole defined therein and extending therethrough for allowing

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the operate shaft extending through the slider, multiple steel balls buried in the slider and radially extending through the slider, each steel ball selectively abutting an inner periphery of the tapered section of the hole in the stopper and the outer periphery of the operate shaft to selectively hold the operate shaft in place, a resilient member mounted around the slider after extending through the stopper for providing a restitution force to make the multiple steel balls engaged to the operate shaft. Although the examiner, respectfully, contends that the connector of Cantlon ('667) could be connected to a handle for manual manipulation, rather than connecting to a power tool, Cantlon ('667) fails to teach, or suggest, such use of the connector, and as such, also fails to provide a controlling device which is mounted to the handle and corresponding to the locking device for forward moving the slider and making the multiple steel balls disengaged from the operate shaft, as claimed in the last clause of claim 1. It is also the examiner's opinion that the prior art of record considered as a whole, alone or in combination, neither anticipates nor renders obvious such a modification.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Amtenbrink et al., Chen, Delaney et al., Howard, Lee, Martindell, Mathews, Peters, and Yess each disclose a connector for tools. Blass, Jones, Parks, and Varnai each disclose a connector.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David B. Thomas whose telephone number is (703) 308-4250. The examiner can normally be reached on 7-4 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on (703) 308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


dbt


David B. Thomas
Patent Examiner
Art Unit 3723